

US Environmental Protection Agency Office of Pesticide Programs

APPENDIX C. ESTIMATED EXPOSURES AND RISK QUOTIENTS FOR TERRESTRIAL ANIMALS AND PLANTS (TERRPLANT V1.2.2, T-REX V. 1.3.1 & T-HERPS V. 1.0)

October 18, 2007

APPENDIX C. ESTIMATED EXPOSURES AND RISK QUOTIENTS FOR TERRESTRIAL ANIMALS AND PLANTS (TERRPLANT V1.2.2, T-REX V. 1.3.1 & T-HERPS V. 1.0)

TerrPlant v. 1.2.2 Green values signify user inputs (Tables 1, 2 and 4). Input and output guidance is in popups indicated by red arrows.

Table 1. Chemical Identity.	
Chemical Name	Bensulide
PC code	9801
Use	Turf Gran
Application Method	Broadcast
Application Form	Granular
Solubility in Water (ppm)	56

able 2. Input parameters used to derive EECs.				
Input Parameter	Symbol	Value	Units	
Application Rate	A	32	lb/acre	
Incorporation	ļ	1	none	
Runoff Fraction	R	0.02	none	
Drift Fraction	D	0	none	

Table 3. EECs for Bensulide. Units in lb/acre.		
Description	Equation	EEC
Runoff to dry areas	(A/I)*R	0.64
Runoff to semi-aquatic areas	(A/I)*R*10	6.4
Spray drift	A*D	0
Total for dry areas	((A/I)*R)+(A*D)	0.64
Total for semi-aquatic areas	((A/I)*R*10)+(A*D)	6.4

Table 4. Plant survival and growth data used for RQ derivation. Units are in lb/acre.					
	Seedling Emergence Vegetative Vigor				
Plant type	EC25	NOAEC	EC25	NOAEC	
Monocot	2.1	0.38	6	0.75	
Dicot	6	1.5	1.3	0.38	

able 5. RQ values for plaps pray drift.*	ants in dry and semi-aqu	atic areas expo	sed to Bensulide throug	gh runoff and/or
Plant Type	Listed Status	Dry	Semi-Aquatic	Spray Drift
Monocot	non-listed	0.30	3.05	<0.1
Monocot	listed	1.68	16.84	<0.1
Dicot	non-listed	0.11	1.07	<0.1
Dicot	listed	0.43	4.27	<0.1
	ceeded, resulting in poten			ζ0.1

TerrPlant v. 1.2.2 Green values signify user inputs (Tables 1, 2 and 4). Input and output guidance is in popups indicated by red arrows.

Table 1. Chemical Identity.	
Chemical Name	Bensulide
PC code	9801
Use	Turf EC
Application Method	Broadcast
Application Form	EC
Solubility in Water (ppm)	56

Table 2. Input parameters used to derive EECs.				
Input Parameter	Symbol	Value	Units	
Application Rate	Α	13.5	lb/acre	
Incorporation	ļ	1	none	
Runoff Fraction	R	0.02	none	
Drift Fraction	D	0.01	none	

Table 3. EECs for Bensulide. Units in lb/acre.		
Description	Equation	EEC
Runoff to dry areas	(A/I)*R	0.27
Runoff to semi-aquatic areas	(A/I)*R*10	2.7
Spray drift	A*D	0.135
Total for dry areas	((A/I)*R)+(A*D)	0.405
Total for semi-aquatic areas	((A/I)*R*10)+(A*D)	2.835

Table 4. Plant survival and growth data used for RQ derivation. Units are in lb/acre.				
	Seedling Emergence Vegetative Vigor			
Plant type	EC25	NOAEC	EC25	NOAEC
Monocot	2.1	0.38	6	0.75
Dicot	6	1.5	1.3	0.38

Table 5. RQ values for place spray drift.*	ants in dry and semi-aqu	uatic areas expos	ed to Bensulide throu	gh runoff and/or
Plant Type	Listed Status	Dry	Semi-Aquatic	Spray Drift
Monocot	non-listed	0.19	1.35	<0.1
Monocot	listed	1.07	7.46	0.36
Dicot	non-listed	<0.1	0.47	0.10
Dicot	listed	0.27	1.89	0.36
*If RQ > 1.0. the LOC is ex	ceeded, resulting in poten	tial for risk to that	plant group.	

TerrPlant v. 1.2.2 Green values signify user inputs (Tables 1, 2 and 4). Input and output guidance is in popups indicated by red arrows.

Table 1. Chemical Identity.		
Chemical Name	Bensulide	
PC code	9801	
Use	Broccoli raab etc	
Application Method	Broadcast	
Application Form	ec	
Solubility in Water (ppm)	56	

Table 2. Input parameters used to derive EECs.				
Input Parameter	Symbol	Value	Units	
Application Rate	А	6	lb/acre	
Incorporation	I	1	none	
Runoff Fraction	R	0.02	none	
Drift Fraction	D	0.01	none	

Table 3. EECs for Bensulide. Units in lb/acre.				
Description	Equation	EEC		
Runoff to dry areas	(A/I)*R	0.12		
Runoff to semi-aquatic areas	(A/I)*R*10	1.2		
Spray drift	A*D	0.06		
Total for dry areas	((A/I)*R)+(A*D)	0.18		
Total for semi-aquatic areas	((A/I)*R*10)+(A*D)	1.26		

Table 4. Plant survival and growth data used for RQ derivation. Units are in lb/acre.					
	Seedling Emergence Vegetative Vigor				
Plant type	EC25 NOAEC		EC25	NOAEC	
Monocot	2.1	0.38	6	0.75	
Dicot	6	1.5	1.3	0.38	

Table 5. RQ values for plants in dry and semi-aquatic areas exposed to Bensulide through runoff and/or spray drift.*				
Plant Type	Listed Status	Dry	Semi-Aquatic	Spray Drift
Monocot	non-listed	<0.1	0.60	<0.1
Monocot	listed	0.47	3.32	0.16
Dicot	non-listed	<0.1	0.21	<0.1
Dicot	listed	0.12	0.84	0.16
*If RQ > 1.0, the LOC is ex	ceeded, resulting in potent	tial for risk to that	plant group.	-

TerrPlant v. 1.2.2 Green values signify user inputs (Tables 1, 2 and 4). Input and output guidance is in popups indicated by red arrows.

Table 1. Chemical Identity.		
Chemical Name	Bensulide	
PC code	9801	
Use	Ornamental, Broccoli etc	
Application Method	Broadcast	
Application Form	EC	
Solubility in Water (ppm)	56	

Table 2. Input parameters used to derive EECs.				
Input Parameter	Symbol	Value	Units	
Application Rate	Α	9	lb/acre	
Incorporation	I	1	none	
Runoff Fraction	R	0.02	none	
Drift Fraction	D	0.01	none	

Table 3. EECs for Bensulide. Units in lb/acre.				
Description	Equation	EEC		
Runoff to dry areas	(A/I)*R	0.18		
Runoff to semi-aquatic areas	(A/I)*R*10	1.8		
Spray drift	A*D	0.09		
Total for dry areas	((A/I)*R)+(A*D)	0.27		
Total for semi-aquatic areas	((A/I)*R*10)+(A*D)	1.89		

Table 4. Plant survival and growth data used for RQ derivation. Units are in lb/acre.					
Seedling Emergence Vegetative Vigor					
Plant type	EC25 NOAEC		EC25	NOAEC	
Monocot	2.1	0.38	6	0.75	
Dicot	6	1.5	1.3	0.38	

Table 5. RQ values for plants in dry and semi-aquatic areas exposed to Bensulide through runoff and/or spray drift.*				
Plant Type	Listed Status	Dry	Semi-Aquatic	Spray Drift
Monocot	non-listed	0.13	0.90	<0.1
Monocot	listed	0.71	4.97	0.24
Dicot	non-listed	<0.1	0.32	<0.1
Dicot	listed	0.18	1.26	0.24
*If RQ > 1.0, the LOC is ex	ceeded, resulting in pote	ential for risk to that p	lant group.	

TerrPlant v. 1.2.2 Green values signify user inputs (Tables 1, 2 and 4). Input and output guidance is in popups indicated by red arrows.

Table 1. Chemical Identity.	
Chemical Name	Bensulide
PC code	9801
Use	ornamental
Application Method	Broadcast
Application Form	granular
Solubility in Water (ppm)	56

Table 2. Input parameters used to derive EECs.				
Input Parameter	Symbol	Value	Units	
Application Rate	А	6	lb/acre	
Incorporation	l	1	none	
Runoff Fraction	R	0.02	none	
Drift Fraction	D	0	none	

Table 3. EECs for Bensulide. Units in lb/acre.				
Description	Equation	EEC		
Runoff to dry areas	(A/I)*R	0.12		
Runoff to semi-aquatic areas	(A/I)*R*10	1.2		
Spray drift	A*D	0		
Total for dry areas	((A/I)*R)+(A*D)	0.12		
Total for semi-aquatic areas	((A/I)*R*10)+(A*D)	1.2		

Table 4. Plant survival and growth data used for RQ derivation. Units are in lb/acre.					
Seedling Emergence Vegetative Vigor					
Plant type	EC25 NOAEC		EC25	NOAEC	
Monocot	2.1	0.38	6	0.75	
Dicot	6	1.5	1.3	0.38	

Table 5. RQ values for plants in dry and semi-aquatic areas exposed to Bensulide through runoff and/or spray drift.*						
Plant Type	Listed Status	Dry	Semi-Aquatic	Spray Drift		
Monocot	non-listed	<0.1	0.57	<0.1		
Monocot	listed	0.32	3.16	<0.1		
Dicot	non-listed	<0.1	0.20	<0.1		
Dicot	listed	<0.1	0.80	<0.1		
*If RQ > 1.0, the LOC is ex	ceeded, resulting in potent	tial for risk to that	plant group.			

Chemical Name:	Bensulide
Use	golf course, residential lawn, turf (gran)
Formulation	Herbicide
Application Rate	32 lbs a.l./acre
Half-life	35 days
Application Interval	120 days
Maximum # Apps./Year	2
Length of Simulation	1 year

Acute and Chronic RQs are based on the Upp Kenaga Residues.

The maximum single day residue estimation is both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables be <0.01 in your assessment. This is due to r figure issues in Excel.



Endpoints			
Avian	Bobwhite quail Bobwhite quail	LD50 (mg/kg-bw) LC50 (mg/kg-diet)	1386.00 0.00
- VIGIT	Mallard duck Mallard duck	NOAEC (mg/kg-diet)	0.00 2.50
Mammals		LD50 (mg/kg-bw) LC50 (mg/kg-diet) NOAEL (mg/kg-bw)	270.00 0.00 7.50
		NOAEC (mg/kg-diet)	150.00

Dietary-based EECs (ppm)	Kenaga Values
Short Grass	8393.28
Tall Grass	3846.92
Broadleaf plants/sm Insects	4721.22
Fruits pods seeds lg insects	524.58

Avian Results

Avian Class	Body Weight (g)	Ingestion (Fdry) (g bwiday)	Ingestion (Fwet) (g/day)	% body wgt consumed	FI (kg-diet/day)
Small	20	5	23	114	2.28E-02
Mid	100	13	65	65	6.49E-02
Large	1000	58	291	29	2.91E-01

Avian Body	Adjusted LD50
Weight (g)	(mg/kg-bw)
20	998.52
100	1271.16
1000	1795.56

Dana hazard EECa	Avian Classes and Body Weights			
Dose-based EECs (mg/kg-bw)	small 20 g	mid 100 g	large 1000 g	
Short Grass	9559.10	5451.00	2440.49	
Tall Grass	4381.26	2498.38	1118.56	
Broadleaf plants'sm Insects	5377.00	3066.19	1372.77	
Emits hods seeds to insects	597.44	340.69	152.53	

Dose-based RQs	Avian Acute RQs			
(Dose-based EEC/adjusted LD50)	20 g	100 g	1000 g	
Short Grass	9.57	4.29	1.36	
Tall Grass	4.39	1.97	0.62	
Broadleaf plants/sm insects	5.38	2.41	0.76	
Coulty mode speeds for inspects	0.60	0.27	0.08	

Dietary-based RQs	RQs		
(Dietary-based EEC/LC50 or NOAEC)	Acute	Chronic	
hort Grass	#DIV/0!	3357,31	
all Grass	#DIV/0!	1538.77	
Broadleaf plants/sm Insects	#DIV/0!	1888.49	
Fruits/pods/seeds to insects	#DIV#!	209.83	

Note: To provide risk management with the maximum possible information, it is recommended that both the dose-based and concentration-based RQs be calculated when data are available

golf course, residential lawn, turf (gran)

Upper bound Kenaga Residues

Bensulide Mammalian Results

Mammalian Class	Body Weight	Ingestion (Fdry) (g bwt/day)	Ingestion (Fwet)	% hody wgt consumed	FI (kg-diet/day)
	15	3	14	95	1.43E-02
Herbivores/	35	5	23	66	2.31E-02
insectivores	1000	31	153	15	1,53E-01
A STATE OF THE PARTY OF THE PAR	15	3	3	21	3.18E-03
Grainvores	35	5	5	15	5.13E-03
	1000	31	31	1	3.40F.02

Mammalian Class	Body Weight	Adjusted LD50	Adjusted NOAEL
	15	593,41	16.48
Herbivores	35	480.14	13.34
insectivores	1000	207.67	5.77
Grainvores	15	593.41	16.48
	35	480.14	13.34
	1000	207.67	5.77

Dose-Based EECs	Mammalian Classes and Body weight					
	Herbivores' insectivores			Granivores		
	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	8002.35	5530.69	1282.31			
Tall Grass	3667.74	2534.90	587.73			
Broadleaf plants sm Insects	4501.32	3111.01	721.30			
Emilia inadelna adella Insacts	500.15	345.67	80.11	111.11	76.92	17.81

Dose-based RQs	15 g mammal		35 g mammal		1000 g mammal	
(Dose-based EEC/LD50 or	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	13.49	485.47	11.52	414.68	6.17	222.29
Tall Grass	6.18	222.51	5.28	190.06	2.83	101.88
Breadleaf plants/sm insects	7.59	273.08	6.48	233.26	3.47	125.04
Fruits/pods/lg insects	0.84	30,34	0.72	25.92	0.39	13,89
	27.22.7	200		0.00	2.22	

Dietary-based RQs	Mammal ROs		
(Dietary-based EEC/LC50 or NOAEC)	Acute	Chronic	
Short Grass	#DIV/0!	55.96	
Tall Grass	#DIV/0!	25,65	
Broadleaf plants sm insects	#DIV/0!	31.47	
Fruits/pods/seeds/lg Insects	≠DIV/0!	3.50	

Chemical: Bensulide

LD50 ft-2

INPUTS Do not overwrite these numbers.				
Appl	ication Rate:	32	lbs / acre	
	% A.I.:	100.00%	*	
Avia	n LD50 (20g):	998.52	mg/kg bw	
	(100g)	1271.16		
	(1000g)	1795.56		
Mammalia	n LD50 (15g):	593.41	mg/kg bw	
	(35g)	480.14		
	(1000g)	207.67		
R	low Spacing:	0	inches	
	Bandwidth:	0	inches	
Unir	ncorporation:	100%		

Changes to the inputs mus made in the "INPUTS" worl

> Questions? Comments? Click here

Row/Band/In-furrow applications

Intermediate Calculations		
N/A		

LD50 ft-2					
wgt class					
Avian	20 g	N/A			
	100 g	N/A			
	1000 g	N/A			
Mammal	15 g	N/A			
	35 g	N/A			
	1000 g	N/A			

Liquid	
Intermediate Calculations	
mg a.i./1000 ft row:	N/A
bandwidth:	N/A
mg a.i./ft2:	N/A
exposed mg a.i./ft2:	N/A

LD50 ft-	2				
	wgt class				
Avian	20 g	N/A			
	100 g	N/A			
	1000 g	N/A			
Mammal	15 g	N/A			
	35 g	N/A			
	1000 g	N/A			

Broadcast applications Granular						
	Intermediate Calculations					
mg ai/ft2:	mg ai/ft2: 333.22					
LD50 ft-2						
wgt class						
Avian	20 g	16.69				
	100 g	2.62				
1000 g 0.19						
Mammal	15 g	37.43				
	35 g	19.83				
	1000 q	1.60				

Formulas used in the calculations are in the User's Guide

Chemical Name:	Bensulide
Use	Residential Lawn (EC)
Formulation	Herbicide
Application Rate	13.5 lbs a.l./acre
Half-life	35 days
Application Interval	120 days
Maximum # Apps./Year	2
Longth of Simulation	1 year

Acute and Chronic RQs are based on the Upp Kenaga Residues.

The maximum single day residue estimation is both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables be <0.01 in your assessment. This is due to r figure issues in Excel.



Endpoints

	Bobwhite quail	LD50 (mg/kg-bw)	1386,00
Avian	Bobwhite quail	LC50 (mg/kg-diet)	0.00
Aviaii	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg kg-diet)	2,50
		LD50 (mg kg-bw)	270.00
Mammals		LC50 (mg/kg-diet)	0.00
Mailillas		NOAEL (mg/kg-bw)	7.50
		NOAEC (mg/kg-diet)	150,00

Dietary-based EECs (ppm)	Kenaga Values
Short Grass	3540.91
Tall Grass	1622.92
Broadleaf plants/sm Insects	1991.76
Fruits/pods/seeds to insects	221.31

Avian Results

Avian Class	Body Weight (g)	Ingestion (Fdry) (g bwiday)	Ingestion (Fwet) (g/day)	% body wgt consumed	FI (kg-diet/day)
Small	20	5	23	114	2.28E-02
Mid	100	13	65	65	6.49E-02
Large	1000	58	291	29	2.91E-01

Avian Body	Adjusted LD50
Weight (g)	(mg/kg-bw)
20	998.52
100	1271.16
1000	1795.56

Dana hazard EECa	Avian C	lasses and Body We	ights
Dose-based EECs (mg/kg-bw)	small 20 g	mid 100 g	large 1000 g
Short Grass	4032.75	2299,64	1029.58
Tall Grass	1848.34	1054.00	471.89
Broadleaf plants'sm Insects	2268.42	1293.55	579.14
Emits hods seeds to insects	252.65	143.73	64.35

Dose-based RQs	Avian Acute RQs			
(Dose-based EEC/adjusted LD50)	20 g	100 g	1000 g	
Short Grass	4.04	1.81	0.57	
Tall Grass	1.85	0.83	0.26	
Broadleaf plants/sm insects	2.27	1.02	0.32	
Fruits pods seeds to insects	0.25	0.11	0.04	

Dietary-based RQs	RQs		
(Dietary-based EEC/LC50 or NOAEC)	Acute	Chronic	
Short Grass	#DIV/0!	1416.37	
Tall Grass	#DIV/0:	649.17	
Broadleaf plants/sm Insects	#DIV/0!	796.71	
Fruits pods seeds lg insects	#DIV/0!	88.52	

Note: To provide risk management with the maximum possible information, it is recommended that both the dose-based and concentration-based RQs be calculated when data are available

Bensulide Mammalian Results

Residential Lawn (EC)

Upper bound Kenaga Residues

Mammalian Class	Body Weight	Ingestion (Fdry) (g bwt/day)	Ingestion (Fwet)	% hody wgt consumed	(kg-diet/day)
	15	3	14	95	1.43E-02
Herbivores'	35	5	23	66	2.31E-02
insectivores	1000	31	153	15	1.53E-01
Water Street	15	3	3	21	3.18E-03
Grainvores	35	5	- 5	15	5.13E-03
	1000	31	34	3	3.40E-02

Mammalian Class	Body Weight	Adjusted LD50	Adjusted NOAEL
	15	593,41	16.48
Herbivores/	35	480.14	13.34
insectivores	1000	207.67	5.77
MINIMA CONTRACTOR	15	593.41	16.48
Grainvores	35	480.14	13.34
	1000	207.67	5.77

	1200	Mam	malian Classes and	Body weight		
Dose-Based EECs	Herbivores/ insectivores				Granivores	
	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	3375.99	2333.26	540.97			
Tall Grass	1547,33	1069.41	247.95			
Broadleaf plants/sm Insects	1898.99	1312.46	304.30			
Emilia inadelna adella Insacts	211.00	115.83	33.84	46.89	32.44	7.51

Dose-based RQs	15 g n	nammal	35 g ı	mammal	1000 g	mammal
(Dose-based EEC/LD50 or	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	5.69	204.81	4.86	174.95	2.60	93.78
Tall Grass	2.61	93.87	2.23	80.18	1.19	42.98
Broadleaf plants'sm insects	3.20	115.20	2.73	98.41	1.47	52.75
Fruits/pods/lg insects	0.36	12,80	0,30	10.93	0.16	5,86
	2.22	4.44	0.00	2.72	2.42	4.00

Dietary-based RQs	Mamn	nat ROs
(Dietary-based EEC/LC50 or NOAEC)	Acute	Chronic
hort Grass	#DIV/0!	23.61
Fall Grass	#DIV/0!	10.82
Broadleaf plants sm insects	#DIV/0!	13.28
Emits/node/seeds/la insects	#DIV/91	1.48

Chemical Name:	Bensulide	
Use	Omamentals	
Formulation	Herbicide	
Application Rate	12.5 lbs a.i./acre	
Half-life	35 days	
Application Interval	365 days	
Maximum # Apps_Year	2	
Length of Simulation	1 wear	

Acute and Chronic RQs are based on the Upp Kenaga Residues.

The maximum single day residue estimation is both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables by <0.01 in your assessment. This is due to r figure issues in Excel.

Questions? Comments? Click here

Endpoints

	Bobwhite quail	LD50 (mg/kg-hw)	1386.00
Avian	Belowhite quail	LC50 (mg/kg-diet)	5620.00
Avian	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	2.50
		LD50 (mg/kg-bw)	270.00
Mammals		LC50 (mg/kg-diet)	0.00
mariiriais		NOAEL (mg/kg-bw)	7.50
		NOAEC (mg/kg-diet)	150.00

Dictary-Dasou LLCs (ppm)	Values
Short Grass	3002.18
Tall Grass	1376.00
Broadleaf plants sm Insects	1688.72
Fruits pods seeds to insects	187.64

Avian Results

Avian Class	Body Weight (g)	Ingestion (Fdry) (g bw/day)	Ingestion (Fwel) (g/day)	% body wgt consumed	FI (kg-diet/day)
Small	20	5	23	114	2.28E-02
Mid	100	13	65	65	6.49E.02
Large	1000	58	291	29	2.91E-01

Avian Body Weight (g)	Adjusted LD50 (mg/kg-bw)	
20	998,52	
100	1271.16	
1000	1795.56	

Dana based EECs	Avian Classes and Body Weights			
Dose-based EECs (mg/kg-bw)	small 20 g	mid 100 g	large 1900 g	
Short Grasa	3419.18	1949.76	872.93	
Tall Grass	1567.12	893,64	400.09	
Broadleaf plants sm Insects	1923,29	1096.74	491.03	
Fruits/pods/seeds/lg insects	213,70	121,86	54.56	

Dose-based RQs	- 1	Avian Acute RQs	
(Dose-based EEC/adjusted LD50)	20 g	100 g	1000 g
Short Grass	3.42	1.53	0.49
Tall Grass	1.57	0.70	0.22
Broadleaf plants'sm insects	1.93	0.86	0.27
Fruits peds seeds lig insects	0.21	0.10	0.03

Dietary-based RQs	R	Os
(Dietary-based EEC/LC50 or NOAEC)	Acute	Chronic
Short Grass	0.53	1200.87
Tall Grass	0.24	550.40
Broadleaf plants sm Insects	0.30	675,49

Note: To provide risk management with the maximum possible information, it is recommended that both the dose-based and concentration-based ROs be calculated when data are available.

Upper bound Kenaga Residues

Bensulide Mammalian Results

Mammallan Class	Body Weight	Ingestion (Fdry)	Ingestion (Fwet) (g/day)	% body wgt consumed	(kg-diet/day)
	15	3	14	95	1.43E-02
Herbivores	35	5	23	66	2.31E.02
insectivores	1000	31	153	15	1.53E-01
A PARTICULAR DE LA CONTRACTOR DE LA CONT	15	3	3	21	3.18E 03
Grainvores	35	5	5	15	5,13E-03
SWITHING S	1000	31	34	1	3.40E-02

Mammalian	Body	Adjusted	Adjusted	
Class	Weight	LD50	NOAEL	
Hesbivores/ Insectivores	15 35 1000	593.41 480.14 207.67	16.48 13.34 5.77	
Grainvores	15	593.41	16.48	
	35	480.14	13.34	
	1000	207.67	5.77	

	8					
Dose-Based EECs	Her	rbivores/ insectivores			Granivores	
(mg kg-bw)	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	2862,35	1978.26	458.67	000		
Tall Grass	1311.91	906.70	210.22			
Broadleaf plants sm Insects	1610,07	1112.77	258,00			
Fruits/nods/seeds to insects	178 90	123.64	28.67	39.75	27.48	6.37

Dose-based RQs	15 g mammal		35 g i	35 g mammal		1000 g mammal	
(Dose-based EEC/LD50 or	Acute	Chronic	Acute	Chronic	Acute	Chrenic	
Short Grass	4.82	173.65	4.12	148,33	2.21	79,51	
Tall Grass	2,21	79.59	1.89	67.98	1.01	36,44	
Broadleaf plants sm Insects	2.71	97.68	2.32	83,43	1.24	44,72	
Fruits/pods/lg insects	0.30	10.85	0.26	9.27	0.14	4.97	
Seeds (granivore)	0.07	2,41	0.06	2.06	0.03	1.10	

Dietary-based RQs	Mamn	ial ROs
(Dietary-based EEC/LC50 or NOAEC)	Acute	Chronic
Short Grass	#DIV/0!	20.01
Yall Grass	#DIV/0!	9.17
Broadleaf plants sm insects	#DIV/01	11.26
Emilia in adeixa adeila insecte	+DD(D)	1.06

Note: To provide risk management with the maximum possible information, it is recommended that both the dose-based and concentration-based RQs be calculated when data are available.

Chemical: Bensulide

LD50 ft-2

INPUTS	Do not overwrite these numbers.				
Арр	lication Rate:	12.5	lbs / acre		
	% A.I.:	100.00%	*		
Avia	nn LD50 (20g):	998.52	mg/kg bw		
	(100g)	1271.16			
	(1000g)	1795.56			
Mammalia	an LD50 (15g):	593.41	mg/kg bw		
	(35g)	480.14			
	(1000g)	207.67			
	Row Spacing:	0	inches		
	Bandwidth:	0	inches		
Uni	ncorporation:	100%			

Changes to the inputs mus made in the "INPUTS" worl

> Questions? Comments? Click here

Row/Band/In-furrow applications

Granular	
Intermediate Calculations	
# rows acre-1:	N/A
row length (ft):	N/A
lb ai/1000 ft row:	N/A
bandwidth (ft):	N/A
mg ai/ft2:	N/A
exposed mg ai/ft2:	N/A

LD50 ft-2		
	wgt class	
Avian	20 g	N/A
	100 g	N/A
	1000 g	N/A
Mammal	15 g	N/A
	35 g	N/A
	1000 g	N/A

Intermedia	ate Calculatio	ns	
	1000 ft row:		/Α
mg am.	bandwidth:		/A
	mg a.i./ft2:		/A
exposed	l mg a.i./ft2:		/Α
CAPOSCE			
LD50 ft-2]
]
	2	N/A	

N/A

N/A

N/A N/A

1000 g

15 g

35 g 1000 g

Mammal

Broadcast	application	ns
Granular		
Intermediate	Calculation	IS
mg ai/ft2:	1:	30.16
LD50 ft-2		
	wgt class	
Avian	20 g	6.52
	100 g	1.02
	1000 g	0.07
Mammal	15 g	14.62
	35 g	7.75
	1000 g	0.63

Chemical Name:	Bensulide
Use	ables, Lettuce (head,leaf), brussel sprout,
Formulation	Herbicide
Application Rate	9 lbs a.i./acre
Half-life	35 days
Application Interval	365 days
Maximum # Apps. Year	1
Length of Simulation	1 year

Acute and Chronic RQs are based on the Upp Kenaga Residues.

The maximum single day residue estimation is both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables be <0.01 in your assessment. This is due to r figure issues in Excel.

Questions? Comments? Click here

Endpoints

	Bohwhite quail	LD50 (mg/kg-bw)	1386.00
Avian	Bobwhite quail	LC50 (mg/kg-diet)	5620.00
Avidii	Mallard duck	NOAEL(mg/kg-bw)	0.00
<u> </u>	Mallard duck	NOAEC (mg/kg-diet)	2.50
		LD50 (mg/kg-bw)	270.00
Mammals		LC50 (mg/kg-diet)	0.00
mariinas		NOAEL (mg/kg-bw)	7.50
		NOAEC (mg/kg-diet)	150.00

Dietary-based EECs (ppm)	Kenaga Values
Short Grass	2160,00
Tall Grass	990.00
Broadleaf plants sm Insects	1215.00
Fruits pods seeds in insects	135.00

Avian Results

Avian Class	Body Weight (g)	Ingestion (Fdry) (g bw/day)	Ingestion (Fwet) (g/day)	5 body wgt consumed	FI (kg-diet/day)
Small	20	5	23	114	2.28E.02
Mid	100	13	65	65	6.49E-02
Large	1000	58	291	29	2.91E-01

Avian Body Weight (g)	Adjusted LD50 (mg/kg-bw)	
20	998.52	
100	1271.16	
1000	1795 56	

Dana based EECs	Avian Classes and Body Weights			
Dose-based EECs (mg/kg-bw)	small 20 g	mid 100 g	large 1000 g	
Short Grass	2460.02	1402.81	628.06	
Tall Grass	1127.51	642.95	287.86	
Broadleaf plants'sm Insects	1383,76	789,08	353,28	
Fruits/pods/seeds/lq insects	153,75	87.68	39.25	

Dose-based RQs	A	Avian Acute RQs	
(Dose-based EEC/adjusted LD50)	20 g	100 g	1000 g
Short Grass	2.46	1.10	0.35
Tall Grass	1.13	0.51	0.16
Broadleaf plants am insects	1.39	0.62	0.20
Fruits pods seeds Iq Insects	0.15	0.07	0.02

Dietary-based RQs	R	Qs
(Dietary-based EEC/LC50 or NOAEC)	Acute	Chronic
Short Grass	0.38	864.00
Fall Grass	0.18	396.00
Broadleaf plants sm Insects	0.22	486,00
Fruits pods seeds la insects	0.02	54.00

Note: To provide risk management with the maximum possible information, it is recommended that both the dose-based and concentration-based ROs be calculated when data are available.

Ornamental, Broccoli, cabbage, cauliflower, collards, cress Upper bound Kenaga Residues

Bensulide Mammalian Results

Mammalian Class	Body Weight	Ingestion (Fdry) (g bwt/day)	Ingestion (Fwet) (g/day)	% body wgt consumed	(kg-diet/day
	15	3	14	95	1.43E-02
Herbivores/	35	5	23	66	2.31E-02
insectivores	1000	31	153	15	1.53E-01
	15	3	3	21	3.18E 03
Grainvores	35	5	5	15	5.13E-03
	1000	31	34	3	3.40E-02

Mammalian Class	Body Weight	Adjusted LD50	Adjusted NOAEL
E	15	593.41	16.48
Herbivores	35	480.14	13,34
insectivores	1000	207.67	5.77
	15	593.41	16.48
Grainvores	35	480.14	13.34
	1000	207.67	5.77

The second secon		Manumalian Classes and Body weight					
Dose-Based EECs	He	rbivores/ insectivores	NO.		Granivores		
(mg/kq-bw)	15 g	35 g	1000 g	15 g	35 g	1000 g	
Short Grass	2059.39	1423.32	330.00	200		-	
fall Grass	943.89	652.35	151.25				
Broadleaf plants sm Insects	1158,41	800,62	185,63				
Fruits/pods/seeds/lq insects	128,71	88.96	20.63	28.60	19,77	4,58	

Dose-based RQs	15 g m	15 g mammal		35 g mammal		1000 g mammal	
(Dose-based EEC/LD50 or	Acute	Chronic	Acute	Chronic	Acute	Chronic	
Short Grass	3,47	124.93	2.96	106.72	1.59	57.21	
Tall Grass	1.59	57.26	1.36	48.91	0.73	26.22	
Broadleaf plants/sm insects	1.95	70.28	1.67	60.03	0.89	32.18	
Fruits/pods/lg insects	0.22	7,81	0.19	6.67	0.10	3,58	
Seeds (granivore)	0.05	1.74	0.04	1.48	0.02	0.79	

Dietary-based RQs	Mammal RQs		
(Dietary-based EEC/LC50 or NOAEC)	Acute	Chronic	
Short Grass	#DIV/0!	14.40	
Tall Grass	#DIV/01	6.60	
Broadleaf plants sm insects	#DIV/0!	8.10	
Fruits pods seeds to insects	#DIV/01	0.90	

Chemical Name:	Bensulide
Use	Celery, pepper, cardoon, dock
Formulation	Herbicide
Application Rate	9 lbs a.l./acre
Half-life	35 days
Application Interval	120 days
Maximum # Apps./Year	2
Longth of Simulation	1 year
	Use Formulation Application Rate Half-life Application Interval Maximum # Apps./Year

Acute and Chronic RQs are based on the Upp Kenaga Residues.

The maximum single day residue estimation is both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables by <0.01 in your assessment. This is due to r figure issues in Excel.



Endpoints

	Bobwhite quail	LD50 (mg/kg-bw)	1386.00
Avian	Bobwhite quail	LC50 (mg/kg-diet)	5620.00
AVIGIT	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	2,50
		L050 (mg/kg-bw)	270.00
Mammals		LC50 (mg/kg-diet)	0.00
		NOAEL (mg/kg-bw)	7.50
		NOAEC (mg/kg-diet)	150,00

Dietary-based EECs (ppm)	Kenaga Values
Short Grass	2360.61
Tall Grass	1081.95
Broadleaf plants sm Insects	1327.84
Fruits/node/sends to insects	147 54

Avian Results

Avian Class	Body Weight (g)	Ingestion (Fdry) (g bwiday)	Ingestion (Fwet) (g/day)	% body wgt consumed	FI (kg-diet/day)
Small	20	5	23	114	2.28E-02
Mid	100	13	65	65	6.49E-02
Large	1000	58	291	29	2.91E-01

Avian Body	Adjusted LD50
Weight (g)	(mg/kg-bw)
20	998.52
100	1271.16
1000	1795.56

Dana hazard EECa	Avian Classes and Body Weights			
Dose-based EECs (mg/kg-bw)	small 20 g	mid 100 g	large 1000 g	
Short Grass	2688.50	1533,10	686,39	
Tall Grass	1232.23	702.67	314.59	
Broadleaf plants'sm Insects	1512.28	862.37	386.09	
Fruits nods seeds to insects	168.03	95.82	42.90	

Dose-based RQs	Avian Acute RQs			
(Dose-based EEC/adjusted LD50)	20 g	100 g	1000 g	
Short Grass	2.69	1.21	0.38	
Tall Grass	1.23	0.55	0.18	
Broadleaf plants/sm insects	1.51	0.68	0.22	
Fruits pods seeds to insects	0.17	0.08	0.02	

Dietary-based RQs	RQs		
(Dietary-based EEC/LC50 or NOAEC)	Acute	Chronic	
Short Grass	0.42	944.24	
Tall Grass	0.19	432.78	
Broadleaf plants/sm Insects	0.24	531.14	
Fruits pods seeds lg insects	0.03	59.02	

Note: To provide risk management with the maximum possible information, it is recommended that both the dose-based and concentration-based RQs be calculated when data are available

Celery, pepper, cardoon, dock

Upper bound Kenaga Residues

Bensulide Mammalian Results

Mammalian Class	Body Weight	Ingestion (Fdry) (g bwt/day)	Ingestion (Fwet)	% hody wgt consumed	FI (kg-diet/day)
	15	3	14	95	1.43E-02
Herbivores/	35	5	23	66	2.31E-02
insectivores	1000	31	153	15	1,53E-01
Market Street	15	3	3	21	3.18E-03
Grainvores	35	5	5	15	5.13E-03
	1000	31	-34	3	3,40E-02

Mammalian Class	Body Weight	Adjusted LD50	Adjusted NOAEL
	15	593.41	16.48
Herbivores/	35	480.14	13.34
insectivores	1000	207.67	5.77
	15	593.41	16.48
Grainvores	35	480.14	13.34
	1000	207.67	5.77

The second second	Mam	malian Classes and	Body weight		
Her	bivores' insectivores			Granivores	
15 g	35 g	1000 g	15 g	35 g	1000 g
2250.66	1555.51	360.65	-		
1031.55	712.94	165.30			
1266.00	874.97	202.87			_
140.67	97.22	22.54	31.26	21.60	5.01
	15 g 2250.66 1031.55 1266.00	Herbivores' insectivores 15 g 35 g 2250.66 1555.51 1031.55 712.94 1266.00 874.97	Herbivores insectivores	Herbivoresi insectivores 15 g	15 g 35 g 1000 g 15 g 35 g 2250.66 1555.51 366.65 1031.55 712.94 165.30 1266.00 074.97 202.87

Dose-based RQs	15 g n	rammal	35 g	mammal	1000 g	mammal
(Dose-based EEC/LD50 or	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	3.79	136.54	3.24	116.63	1.74	62.52
Tall Grass	1.74	62.58	1.48	53.46	0.80	28.65
Breadleaf plants/sm insects	2.13	76.80	1.82	65.60	0.98	35.17
Fruits/pods/lg insects	0.24	8,53	0.20	7.29	0.11	3.91
	2.22	2.44	222	252	2.22	

Dietary-based RQs	Mammal ROs		
(Dietary-based EEC/LC50 or NOAEC)	Acute	Chronic	
Short Grass	#DIV/0!	15.74	
Tall Grass	#DIV/0!	7.21	
Broadleaf plants sm insects	#DIV/0!	8.85	
Fruits/pods/seeds/lg Insects	≠DIV/0!	0.98	

Bensulide

Acute and Chronic RQs are based on the Upp Kenaga Residues

The maximum single day residue estimation is both the acute and reproduction RQs.

ROs reported as "0,00" in the RO tables be <0.01 in your assessment. This is due to r figure issues in Excel.

Questions? Comments? Click here

Endpoints

	Bobwhite quali	L050 (mg/kg-bw)	1386.00
Avian	Bobwhite quall	LC50 (mg/kg-dlet)	5620.00
Avian	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	HOAEC (mg/kg-diet)	2.50

		HOAEC (c
Dietary-based EECs (ppm)	Kenaga Values	
Short Green	1573.74	

Avian Results

Avian Class	Body Weight (g)	Ingestion (Fdry) (g-bw/day)	Ingestion (Fwet) (g/day)	% body wgt consumed	FI (kg-diet/day)
Small	20	5	23	114	2.28E-02
Mid	100	13	65	65	6,49E-02
Large	1000	58	291	29	2.91E-01

Avian Body	Adjusted LD50
Weight (g)	(mg/kg-low)
20	990.52
100	1271.16
1000	1795 56

Dana hannel EEC-	Avian C	lasses and Body Wei	ghts
Dose-based EECs (mg/kg-l/w)	small 20 g	mid 100 q	large 1000 g
Short Grass	1792.33	1022.06	457.59
Tall Grass	821.49	468.45	209.73
Broadleaf plants/sm Insects	1008,19	574.91	257.40
Fruits/nods/seeds/lg insects	112.62	63.88	28 60

Dose-based RQs	-	vian Acute ROs	
(Dose-based EEC/adjusted LD50)	20 g	100 g	1000 g
Short Grass	1.79	0.80	0.25
Tall Grass	0.82	0.37	0.12
Broadleaf plants am insects	1.01	0.45	0.14
Fruits/pods/seeds/lg insects	0.11	0.05	0.02

Dietary-based RQs	R	Qs
(Dietary-based EEC/LC50 or NOAEC)	Acute	Chronic
hort Grass	0.28	629,50
Tall Grass	0.13	288,52
Broadleaf plants/sm Insects	0.16	354.09
Emitsinods/seeds/la Insects	0.02	39.34

Note: To provide risk management with the maximum possible information, it is recommended that both the dose-based and concentration-based RGs be calculated when data are available

Upper bound Kenaga Residues

Mammalian Results

Mammalian Class	Body Weight	Ingestion (Fdry) (g lowt/day)	Ingestion (Fwet) (g-day)	's body wgt consumed	(kg-diet/day)
	15	3	14	95	1.43E-02
Herbivores/	35	5	23	66	2.31E-02
Insectivores	1000	31	153	15	1,53E-01
	15	3	3	21	3.18E-03
Grainveres	35	5	5	15	5,13E-03
	1000	31	34	3	3,40E-02

Mammalian Class	Body Weight	Adjusted LD50	Adjusted NOAEL
	15	593,41	16.43
Herbivores	35	480.14	13.34
insectivores.	1000	207.67	5.77
order training	15	593,41	16.48
Grainvores	35	480.14	13.34
Name and Address of the Parket	1000	207.67	5.77

(4)	Mammalian Classes and Body weight						
Dose-Based EECs	Her	rbivores/insectivores			Granivores		
(mg/kg-low)	15 g	35 g	1000 g	15 g	35 g	1000 g	
Short Grass	1500,44	1037.00	240.43	A STATE OF THE PARTY OF THE PAR	Total Control	The second second	
Tall Grass	687.70	475.29	110.20				
Broadleaf plants am Insects	844.00	583.32	135.24				
Fruits pods seeds ig insects	93.78	64.81	15.03	20.84	14.40	3.34	

Dose-based RQs	15 g n	15 g mammal 35		35 g mammal		1000 g mammal	
(Dose-based EEC/LD50 or	Acute	Chronic	Acute	Chronic	Acute	Chronic	
short Grass	2.53	91.03	2.16	77.75	1.16	41.68	
all Grass	1.16	41.72	0.99	35.64	0.53	19.10	
Iroadleaf plants sm insects	1,42	51.20	1.21	43.74	0.65	23,44	
ruits pods lg insects	0.16	5.69	0.13	4.86	0.07	2.60	
Saade (granhunga)	0.04	1.26	0.03	1.03	0.02	0.58	

Dietary-based RQs	Mamn	sal ROs
(Dietary-based EEC/LC50 or NOAEC)	Acute	Chronic
Short Grass	#DIV/0:	10.49
Tall Grass	#DIV/0!	4.81
Broadleaf plants sm insects	#DIV/01	5.90
Contrate delicated and all a formats	-parent	0.00

Note: To provide risk management with the maximum possible information, it is recommended that both the dose-based and concentration-based ROs be calculated when data are available

Chemical Name:	Bensulide
Use	Turf
Formulation	daikon
Application Rate	9 lbs a.i./acre
Half-life	35 days
Application Interval	120 days
Maximum # Apps./Year	3
Length of Simulation	1 year

Acute and Chronic RQs are based on the Uppe Kenaga Residues.

The maximum single day residue estimation is both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables belo <0.01 in your assessment. This is due to rot figure issues in Excel.

Endpoints			
	Bobwhite quail	LD50 (mg/kg-bw)	1386.00
Avian	Bobwhite quail	LC50 (mg/kg-diet)	5620.00
Avidii	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	2.50
		LD50 (mg/kg-bw)	270.00
Mammals		LC50 (mg/kg-diet)	0.00
Maiillais		NOAEL (mg/kg-bw)	7.50
		NOAEC (mg/kg-diet)	150.00
	Kenaga		
Dietary-based EECs (ppm)	Values		
Short Grass	2379.24		
Tall Grass	1090.49		
Broadleaf plants/sm Insects	1338.32		
Fruits/pods/seeds/lg insects	148.70		

Avian Results

Avian Class	Body Weight (g)	Ingestion (Fdry) (g bw/day)	Ingestion (Fwet) (g/day)	% body wgt consumed	FI (kg-diet/day)
Small	20	5	23	114	2.28E-02
Mid	100	13	65	65	6.49E-02
Large	1000	58	291	29	2.91E-01

Avian Body	Adjusted LD50
Weight (g)	(mg/kg-bw)
20	998.52
100	1271.16
4000	4705.50

Dose-based EECs	Avian C	Avian Classes and Body Weights			
Dose-based EECs	small	mid	large		
(mg/kg-bw)	20 g	100 g	1000 g		
Short Grass	2709.72	1545.20	691.80		
Tall Grass	1241.95	708.21	317.08		
Broadleaf plants/sm Insects	1524.22	869.17	389.14		
Fruits/pods/seeds/lg insects	169 36	96 57	43.24		

Dose-based RQs	Avian Acute RQs			
(Dose-based EEC/adjusted LD50)	20 g	100 g	1000 g	
Short Grass	2.71	1.22	0.39	
Tall Grass	1.24	0.56	0.18	
Broadleaf plants/sm insects	1.53	0.68	0.22	
Eruite/pode/egode/la ineacte	0.17	0.00	0.02	

Dietary-based RQs	RQs		
(Dietary-based EEC/LC50 or			
NOAEC)	Acute	Chronic	
Short Grass	0.42	951.70	
Tall Grass	0.19	436.19	
Broadleaf plants/sm Insects	0.24	535.33	
Fruits/pods/seeds/lg insects	0.03	59.48	

Note: To provide risk management with the maximum possible information.

RQs be calculated when data are available

Bensulide Turn
Mammalian Results

Upper bound Kenaga Residues

Mammalian	Body	Ingestion (Fdry)	Ingestion (Fwet)	% body wgt	FI
Class	Weight	(g bwt/day)	(g/day)	consumed	(kg-diet/day)
	15	3	14	95	1.43E-02
Herbivores/	35	5	23	66	2.31E-02
insectivores	1000	31	153	15	1.53E-01
	15	3	3	21	3.18E-03
Grainvores	35	5	5	15	5.13E-03
	1000	31	34	3	3.40E-02

Mammalian	Body	Adjusted	Adjusted
Class	Weight	LD50	NOAEL
	15	593.41	16.48
Herbivores/	35	480.14	13.34
insectivores	1000	207.67	5.77
	15	593.41	16.48
Grainvores	35	480.14	13.34
	1000	207.67	5.77

	Mammalian Classes and Body weight					
Dose-Based EECs	Herbivores/ insectivores				Granivores	
(mg/kg-bw)	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	2268.42	1567.78	363.50			
Tall Grass	1039.69	718.57	166.60			
Broadleaf plants/sm Insects	1275.99	881.88	204.47			
Fruits/pods/seeds/lg insects	141.78	97.99	22.72	31.51	21.77	5.05

Dose-based RQs	15 g mammal		35 g mammal		1000 g mammal	
(Dose-based EEC/LD50 or NOAEL)	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	3.82	137.62	3.27	117.55	1.75	63.01
Tall Grass	1.75	63.07	1.50	53.88	0.80	28.88
Broadleaf plants/sm insects	2.15	77.41	1.84	66.12	0.98	35.44
Fruits/pods/lg insects	0.24	8.60	0.20	7.35	0.11	3.94
Seeds (granivore)	0.05	1.91	0.05	1.63	0.02	0.88

Dietary-based RQs	Mammal RQs		
(Dietary-based EEC/LC50 or			
NOAEC)	Acute	Chronic	
Short Grass	#DIV/0!	15.86	
Tall Grass	#DIV/0!	7.27	
Broadleaf plants/sm insects	#DIV/0!	8.92	
Fruits/pods/seeds/lg insects	#DIV/0!	0.99	

Chemical Name	Bensulide
Us	e Turf
Formulation	n Broccoli raab, broccoli, Chinese, chard
Application Rate	6 lbs a.i./acre
Half-life	
Application Interv	al 365 days
Maximum # Apps./Yea	nr 1
Length of Simulation	n 1 year

Acute and Chronic RQs are based on the Uppe Kenaga Residues.

The maximum single day residue estimation is lobth the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables belo <0.01 in your assessment. This is due to rot figure issues in Excel.

Endpoints			
	Bobwhite quail	LD50 (mg/kg-bw)	1386.00
Avian	Bobwhite quail	LC50 (mg/kg-diet)	5620.00
Aviali	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	2.50
		LD50 (mg/kg-bw)	270.00
Mammals		LC50 (mg/kg-diet)	0.00
Wallillais		NOAEL (mg/kg-bw)	7.50
		NOAEC (mg/kg-diet)	150.00
Dietary-based EECs (ppm)	Kenaga		
, , ,	Values		
Short Grass Tall Grass	1440.00 660.00		
Broadleaf plants/sm Insects	810.00		
Fruits/pods/seeds/lg insects	90.00		

Avian Results

Avian Class	Body Weight (g)	Ingestion (Fdry) (g bw/day)	Ingestion (Fwet) (g/day)	% body wgt consumed	FI (kg-diet/day)
Small	20	5	23	114	2.28E-02
Mid	100	13	65	65	6.49E-02
Large	1000	58	291	29	2.91E-01

Avian Body	Adjusted LD50
Weight (g)	(mg/kg-bw)
20	998.52
100	1271.16

Dose-based EECs	Avian C	Avian Classes and Body Weights			
Dose-based EECs	small	mid	large		
(mg/kg-bw)	20 g	100 g	1000 g		
Short Grass	1640.02	935.21	418.70		
Tall Grass	751.67	428.64	191.91		
Broadleaf plants/sm Insects	922.51	526.05	235.52		
Fruits/pods/seeds/lg insects	102.50	58.45	26.17		

Dose-based RQs		Avian Acute RQs	
(Dose-based EEC/adjusted LD50)	20 g	100 g	1000 g
Short Grass	1.64	0.74	0.23
Tall Grass	0.75	0.34	0.11
Broadleaf plants/sm insects	0.92	0.41	0.13
Fruits/pods/seeds/la insects	0.10	0.05	0.01

Dietary-based RQs	R	Qs
(Dietary-based EEC/LC50 or		
NOAEC)	Acute	Chronic
Short Grass	0.26	576.00
Tall Grass	0.12	264.00
Broadleaf plants/sm Insects	0.14	324.00
Fruits/pods/seeds/lg insects	0.02	36.00

Note: To provide risk management with the maximum possible information, it is recommended that both the dose-based and concentration-based RQs be calculated when data are available

Bensulide	Turf	
Mammalian Results		

Mammalian	Body	Ingestion (Fdry)	Ingestion (Fwet)	% body wgt	FI
Class	Weight	(g bwt/day)	(g/day)	consumed	(kg-diet/day)
	15	3	14	95	1.43E-02
Herbivores/	35	5	23	66	2.31E-02
insectivores	1000	31	153	15	1.53E-01
	15	3	3	21	3.18E-03
Grainvores	35	5	5	15	5.13E-03
	1000	31	34	3	3.40E-02

Upper bound Kenaga Residues

Mammalian	Body	Adjusted	Adjusted
Class	Weight	LD50	NOAEL
	15	593.41	16.48
Herbivores/	35	480.14	13.34
insectivores	1000	207.67	5.77
	15	593.41	16.48
Grainvores	35	480.14	13.34
	1000	207.67	5.77

		Mammalian Classes and Body weight					
Dose-Based EECs	H	erbivores/ insectivores			Granivores		
(mg/kg-bw)	15 g	35 g	1000 g	15 g	35 g	1000 g	
Short Grass	1372.93	948.88	220.00				
Tall Grass	629.26	434.90	100.83				
Broadleaf plants/sm Insects	772.27	533.74	123.75				
Fruits/pods/seeds/lg insects	85.81	59.30	13.75	19.07	13.18	3.06	

Dose-based RQs	15 g mammal		35 g mammal		1000 g mammal	
(Dose-based EEC/LD50 or NOAEL)	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	2.31	83.29	1.98	71.15	1.06	38.14
Tall Grass	1.06	38.17	0.91	32.61	0.49	17.48
Broadleaf plants/sm insects	1.30	46.85	1.11	40.02	0.60	21.45
Fruits/pods/lg insects	0.14	5.21	0.12	4.45	0.07	2.38
Seeds (granivore)	0.03	1.16	0.03	0.99	0.01	0.53

Dietary-based RQs	Mammal RQs		
(Dietary-based EEC/LC50 or			
NOAEC)	Acute	Chronic	
Short Grass	#DIV/0!	9.60	
Tall Grass	#DIV/0!	4.40	
Broadleaf plants/sm insects	#DIV/0!	5.40	
Fruits/pods/seeds/lg insects	#DIV/0!	0.60	

Chemical Name:	Bensulide
Use	Turf
Formulation	celtuce, chervil, , chrysanthemum
Application Rate	6 lbs a.i./acre
Half-life	35 days
Application Interval	120 days
Maximum # Apps./Year	2
Length of Simulation	1 year

Acute and Chronic RQs are based on the Uppe Kenaga Residues.

The maximum single day residue estimation is a both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables bek <0.01 in your assessment. This is due to roi figure issues in Excel.

Endpoints			
	Bobwhite quail	LD50 (mg/kg-bw)	1386.00
Avian	Bobwhite quail	LC50 (mg/kg-diet)	5620.00
Aviaii	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	2.50
		LD50 (mg/kg-bw)	270.00
Mammals		LC50 (mg/kg-diet)	0.00
IVIAIIIIIIAIS		NOAEL (mg/kg-bw)	7.50
		NOAEC (mg/kg-diet)	150.00
Dietary-based EECs (ppm)	Kenaga		
Dictary Buscu LLOS (ppin)	Values		

Avian Results

Avian	Body	Ingestion (Fdry)	Ingestion (Fwet)	% body wgt	FI
Class	Weight (g)	(g bw/day)	(g/day)	consumed	(kg-diet/day)
Small	20	5	23	114	2.28E-02
Mid	100	13	65	65	6.49E-02
Large	1000	58	291	29	2.91E-01

Avian Body	Adjusted LD50
Weight (g)	(mg/kg-bw)
20	998.52
100	1271.16
1000	1705 SC

Dose-based EECs	Avian Classes and Body Weights			
Dose-based EECs	small	mid	large	
(mg/kg-bw)	20 g	100 g	1000 g	
Short Grass	1792.33	1022.06	457.59	
Tall Grass	821.49	468.45	209.73	
Broadleaf plants/sm Insects	1008.19	574.91	257.40	
Fruits/pods/seeds/lg insects	112.02	63.88	28.60	

Dose-based RQs	Avian Acute RQs			
(Dose-based EEC/adjusted LD50)	20 g	100 g	1000 g	
Short Grass	1.79	0.80	0.25	
Tall Grass	0.82	0.37	0.12	
Broadleaf plants/sm insects	1.01	0.45	0.14	
Fruits/pods/seeds/lg insects	0.11	0.05	0.02	

Dietary-based RQs	R	Qs
(Dietary-based EEC/LC50 or		
NOAEC)	Acute	Chronic
Short Grass	0.28	629.50
Tall Grass	0.13	288.52
Broadleaf plants/sm Insects	0.16	354.09
Fruits/pods/seeds/lg insects	0.02	39.34

Note: To provide risk management with the maximum possible information, it is recommended that both the dose-based and concentration-based RQs be calculated when data are available

Bensulide		Turf	Upper bound Kenaga Residues
	 _		

Mam	malian	Results

Mammalian	Body	Ingestion (Fdry)	Ingestion (Fwet)	% body wgt	FI
Class	Weight	(g bwt/day)	(g/day)	consumed	(kg-diet/day)
	15	3	14	95	1.43E-02
Herbivores/	35	5	23	66	2.31E-02
insectivores	1000	31	153	15	1.53E-01
	15	3	3	21	3.18E-03
Grainvores	35	5	5	15	5.13E-03
	1000	31	34	3	3.40E-02

Mammalian	Body	Adjusted	Adjusted
Class	Weight	LD50	NOAEL
	15	593.41	16.48
Herbivores/	35	480.14	13.34
insectivores	1000	207.67	5.77
	15	593.41	16.48
Grainvores	35	480.14	13.34
	1000	207.67	5.77

	Mammalian Classes and Body weight						
Dose-Based EECs	Herbivores/ insectivores			Granivores			
(mg/kg-bw)	15 g	35 g	1000 g	15 g	35 g	1000 g	
Short Grass	1500.44	1037.00	240.43				
Tall Grass	687.70	475.29	110.20				
Broadleaf plants/sm Insects	844.00	583.32	135.24				
Fruits/pods/seeds/lg insects	93.78	64.81	15.03	20.84	14.40	3.34	

Dose-based RQs	15 g mammal Acute Chronic		35 g mammal		1000 g mammal	
(Dose-based EEC/LD50 or NOAEL)			Acute Chronic		Acute Chronic	
Short Grass	2.53	91.03	2.16	77.75	1.16	41.68
Tall Grass	1.16	41.72	0.99	35.64	0.53	19.10
Broadleaf plants/sm insects	1.42	51.20	1.21	43.74	0.65	23.44
Fruits/pods/lg insects	0.16	5.69	0.13	4.86	0.07	2.60
Seeds (granivore)	0.04	1.26	0.03	1.08	0.02	0.58

Dietary-based RQs	Mamn	nal RQs
(Dietary-based EEC/LC50 or		
NOAEC)	Acute	Chronic
Short Grass	#DIV/0!	10.49
Tall Grass	#DIV/0!	4.81
Broadleaf plants/sm insects	#DIV/0!	5.90
Fruits/pods/seeds/la insects	#DIV/0!	0.66

Chemical Name:	Bensulide
Use	Turf
Formulation	Onion, orach (mountain spinach), shallot
Application Rate	6 lbs a.i./acre
Half-life	35 days
Application Interval	120 days
Maximum # Apps./Year	4
Length of Simulation	1 year

Acute and Chronic RQs are based on the Uppe Kenaga Residues.

The maximum single day residue estimation is a both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables bek <0.01 in your assessment. This is due to roi figure issues in Excel.

Endpoints			
	Bobwhite quail	LD50 (mg/kg-bw)	1386.00
Avian	Bobwhite quail	LC50 (mg/kg-diet)	5620.00
Avidii	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	2.50
		LD50 (mg/kg-bw)	270.00
Mammals		LC50 (mg/kg-diet)	0.00
Widililiai5		NOAEL (mg/kg-bw)	7.50
		NOAEC (mg/kg-diet)	150.00
Dietary-hased FFCs (npm)	Kenaga		

Dietary-based EECs (ppm)	Values
Short Grass	1587.31
Tall Grass	727.52
Broadleaf plants/sm Insects	892.86
Fruits/pods/seeds/lg insects	99.21

Avian Results

Avian Class	Body Weight (g)	Ingestion (Fdry)	Ingestion (Fwet) (g/day)	% body wgt consumed	FI (kg-diet/day)
Small	20	(g bw/day)	23	114	2.28E-02
Mid	100	13	65	65	6.49E-02
Large	1000	58	291	29	2.91E-01

Avian Body	Adjusted LD50
Weight (g)	(mg/kg-bw)
20	998.52
100	1271.16
1000	1705 SC

Dose-based EECs	Avian Classes and Body Weights					
Dose-based EECs	small	small mid large				
(mg/kg-bw)	20 g	100 g	1000 g			
Short Grass	1807.79	1030.88	461.54			
Tall Grass	828.57	472.49	211.54			
Broadleaf plants/sm Insects	1016.88	579.87	259.62			
Fruits/pods/seeds/lg insects	112.99	64.43	28.85			

Dose-based RQs	Avian Acute RQs				
(Dose-based EEC/adjusted LD50)	20 g 100 g 1000 g				
Short Grass	1.81	0.81	0.26		
Tall Grass	0.83	0.37	0.12		
Broadleaf plants/sm insects	1.02	0.46	0.14		
Fruits/pods/seeds/lg insects	0.11	0.05	0.02		

Dietary-based RQs	RQs	
(Dietary-based EEC/LC50 or		
NOAEC)	Acute	Chronic
Short Grass	0.28	634.93
Tall Grass	0.13	291.01
Broadleaf plants/sm Insects	0.16	357.15
Fruits/pods/seeds/lg insects	0.02	39.68

Note: To provide risk management with the maximum possible information, it is recommended that both the dose-based and concentration-based RQs be calculated when data are available

Bensulide	Turf
Mammalian Results	

Upper bound Kenaga Residue

Mammalian	Body	Ingestion (Fdry)	Ingestion (Fwet)	% body wgt	FI
Class	Weight	(g bwt/day)	(g/day)	consumed	(kg-diet/day)
	15	3	14	95	1.43E-02
Herbivores/	35	5	23	66	2.31E-02
insectivores	1000	31	153	15	1.53E-01
	15	3	3	21	3.18E-03
Grainvores	35	5	5	15	5.13E-03
	1000	31	34	3	3.40F+02

Mammalian	Body	Adjusted	Adjusted
Class	Weight	LD50	NOAEL
	15	593.41	16.48
Herbivores/	35	480.14	13.34
insectivores	1000	207.67	5.77
	15	593.41	16.48
Grainvores	35	480.14	13.34
	1000	207.67	5.77

		Mammalian Classes and Body weight				
Dose-Based EECs	He	erbivores/ insectivores			Granivores	
(mg/kg-bw)	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	1513.38	1045.95	242.51			
Tall Grass	693.63	479.39	111.15			
Broadleaf plants/sm Insects	851.28	588.35	136.41			
Fruits/pods/seeds/lg insects	94,59	65.37	15.16	21.02	14.53	3.37

Dose-based RQs	15 g m	ammal	35 g r	nammal	1000 g ı	mammal
(Dose-based EEC/LD50 or NOAEL)	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	2.55	91.81	2.18	78.42	1.17	42.04
Tall Grass	1.17	42.08	1.00	35.94	0.54	19.27
Broadleaf plants/sm insects	1.43	51.64	1.23	44.11	0.66	23.65
Fruits/pods/lg insects	0.16	5.74	0.14	4.90	0.07	2.63
Seeds (granivore)	0.04	1.28	0.03	1.09	0.02	0.58

Dietary-based RQs	Mammal RQs	
(Dietary-based EEC/LC50 or		
NOAEC)	Acute	Chronic
Short Grass	#DIV/0!	10.58
Tall Grass	#DIV/0!	4.85
Broadleaf plants/sm insects	#DIV/0!	5.95
Fruits/pods/seeds/lg insects	#DIV/0!	0.66

Upper Bound Kenaga Residues For RQ Calculation Chemical Name: Use Formulation Application Rate Half-life Application Interval Maximum # Apps/Year Length of Simulation 1 year

Acute and Chronic RQs are based on the Upper Bound Kenaga Residues.

The maximum single day residue estimation is used for both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables below should be noted ϵ <0.01 in your assessment. This is due to rounding and significa figure issues in Excel.

Endpoints			
	Bobwhite quail	LD50 (mg/kg-bw)	1386.00
Avian	Bobwhite quail	LC50 (mg/kg-diet)	0.00
Aviali	Bobwhite quail	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	2.50

Dietary-based EECs (ppm)	Kenaga
Dietary-baseu EECs (ppm)	Values
Short Grass	3540.91
Tall Grass	1622.92
Broadleaf plants/sm Insects	1991.76
Fruits/pods/seeds/lg insects	221.31
Small herbivore mammals	2333.26
Small insectivore mammals	145.83
Small terrestrial phase amphibians	69.14

Weight	Body	Ingestion (Fdry)	Ingestion (Fwet)	% body wgt	FI
Class	Weight (g)	(g bw/day)	(g/day)	consumed	(kg-diet/day)
Small	1.4	0.017	0.1	3.9	5.44E-05
Mid	37	0.212	1.4	3.8	1.41E-03
Large	100	0.457	3.0	3.0	3.05E-03

Body	Adjusted LD50
Weight (g)	(mg/kg-bw)
1.4	1386.00
37	1386.00
100	1386.00

Dage based EECs	Herpetofau	nal Size Classes and B	ody Weights
Dose-based EECs	small (g)	mid (g)	large (g)
(mg/kg-bw)	1.4	37	100
Short Grass	137.57	135.20	107.89
Tall Grass	63.05	61.97	49.45
Broadleaf plants/sm Insects	77.38	76.05	60.69
Fruits/pods/seeds/lg insects	8.60	8.45	6.74
Small herbivore mammals	N/A	2207.14	816.64
Small insectivore mammals	N/A	137.95	51.04
Small terrestrial phase amphibian	N/A	2.64	2.11

Upper Bound Kenaga Residues For RQ Calculation Chemical Name: Use broc, raab Formulation Herbicide Application Rate 6 lbs a.i./acre Half-life 35 days Application Interval 365 days Maximum # Apps./Year Length of Simulation 1 year

Acute and Chronic RQs are based on the Upper Bound Kenaga Residues.

The maximum single day residue estimation is used for both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables below should be noted ϵ <0.01 in your assessment. This is due to rounding and significa figure issues in Excel.

Endpoints			
	Bobwhite quail	LD50 (mg/kg-bw)	1386.00
Avian	Bobwhite quail	LC50 (mg/kg-diet)	0.00
Aviali	Bobwhite quail	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	2.50

Dietary-based EECs (ppm)	Kenaga	
Dietary-baseu EECS (ppm)	Values	
Short Grass	1440.00	
Tall Grass	660.00	
Broadleaf plants/sm Insects	810.00	
Fruits/pods/seeds/lg insects	90.00	
Small herbivore mammals	948.88	
Small insectivore mammals	59.30	
Small terrestrial phase amphibians	28.12	

Weight	Body	Ingestion (Fdry)	Ingestion (Fwet)	% body wgt	FI
Class	Weight (g)	(g bw/day)	(g/day)	consumed	(kg-diet/day)
Small	1.4	0.017	0.1	3.9	5.44E-05
Mid	37	0.212	1.4	3.8	1.41E-03
Large	100	0.457	3.0	3.0	3.05E-03

Body	Adjusted LD50
Weight (g)	(mg/kg-bw)
1.4	1386.00
37	1386.00
100	1386.00

Dage based EECs	Herpetofau	nal Size Classes and B	ody Weights
Dose-based EECs	small (g)	mid (g)	large (g)
(mg/kg-bw)	1.4	37	100
Short Grass	55.95	54.98	43.87
Tall Grass	25.64	25.20	20.11
Broadleaf plants/sm Insects	31.47	30.93	24.68
Fruits/pods/seeds/lg insects	3.50	3.44	2.74
Small herbivore mammals	N/A	897.59	332.11
Small insectivore mammals	N/A	56.10	20.76
Small terrestrial phase amphibian	N/A	1.07	0.86

Chemical Name:	Bensulide
Use	celery
Formulation	Herbicide
Application Rate	9 lbs a.i./acre
Half-life	35 days
Application Interval	120 days
Maximum # Apps./Year	2
Length of Simulation	1 year

Acute and Chronic RQs are based on the Upper Bound Kenaga Residues.

The maximum single day residue estimation is used for both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables below should be noted ϵ <0.01 in your assessment. This is due to rounding and significa figure issues in Excel.

Endpoints			
	Bobwhite quail	LD50 (mg/kg-bw)	1386.00
Avian	Bobwhite quail	LC50 (mg/kg-diet)	0.00
Aviali	Bobwhite quail	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	2.50

Dietary-based EECs (ppm)	Kenaga
Dietal y-based EECs (ppm)	Values
Short Grass	2360.61
Tall Grass	1081.95
Broadleaf plants/sm Insects	1327.84
Fruits/pods/seeds/lg insects	147.54
Small herbivore mammals	1555.51
Small insectivore mammals	97.22
Small terrestrial phase amphibians	46.09

Weight	Body	Ingestion (Fdry)	Ingestion (Fwet)	% body wgt	FI
Class	Weight (g)	(g bw/day)	(g/day)	consumed	(kg-diet/day)
Small	1.4	0.017	0.1	3.9	5.44E-05
Mid	37	0.212	1.4	3.8	1.41E-03
Large	100	0.457	3.0	3.0	3.05E-03

Body	Adjusted LD50
Weight (g)	(mg/kg-bw)
1.4	1386.00
37	1386.00
100	1386.00

Dose-based EECs	Herpetofaunal Size Classes and Body Weights			
Dose-based EECS	small (g)	mid (g)	large (g)	
(mg/kg-bw)	1.4	37	100	
Short Grass	91.71	90.14	71.92	
Tall Grass	42.04	41.31	32.97	
Broadleaf plants/sm Insects	51.59	50.70	40.46	
Fruits/pods/seeds/lg insects	5.73	5.63	4.50	
Small herbivore mammals	N/A	1471.43	544.43	
Small insectivore mammals	N/A	91.96	34.03	
Small terrestrial phase amphibian	N/A	1.76	1.40	

Chemical Name	Bensulide
Use	etc., Brocolli etc.; Lettuce etc.; Melon etc.; T
Formulation	Herbicide
Application Rate	9 lbs a.i./acre
Half-life	35 days
Application Interva	I 365 days
Maximum # Apps./Yea	1
Length of Simulation	1 year

Acute and Chronic RQs are based on the Upper Bound Kenaga Residues.

The maximum single day residue estimation is used for both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables below should be noted ϵ <0.01 in your assessment. This is due to rounding and significa figure issues in Excel.

Endpoints			
	Bobwhite quail	LD50 (mg/kg-bw)	1386.00
Avian Bobwhite quail	Bobwhite quail	LC50 (mg/kg-diet)	5620.00
	NOAEL(mg/kg-bw)	0.00	
	Mallard duck	NOAEC (mg/kg-diet)	2.50

Dietary-based EECs (ppm)	Kenaga		
Dietal y-based EECs (ppm)	Values		
Short Grass	2160.00		
Tall Grass	990.00		
Broadleaf plants/sm Insects	1215.00		
Fruits/pods/seeds/lg insects	135.00		
Small herbivore mammals	1423.32		
Small insectivore mammals	88.96		
Small terrestrial phase amphibians	42.17		

Weight	Body	Ingestion (Fdry)	Ingestion (Fwet)	% body wgt	FI
Class	Weight (g)	(g bw/day)	(g/day)	consumed	(kg-diet/day)
Small	1.4	0.017	0.1	3.9	5.44E-05
Mid	37	0.212	1.4	3.8	1.41E-03
Large	100	0.457	3.0	3.0	3.05E-03

Body	Adjusted LD50
Weight (g)	(mg/kg-bw)
1.4	1386.00
37	1386.00
100	1386.00

Dose-based EECs	Herpetofaunal Size Classes and Body Weights			
Dose-based EECs	small (g)	mid (g)	large (g)	
(mg/kg-bw)	1.4	37	100	
Short Grass	83.92	82.48	65.81	
Tall Grass	38.46	37.80	30.16	
Broadleaf plants/sm Insects	47.20	46.39	37.02	
Fruits/pods/seeds/lg insects	5.24	5.15	4.11	
Small herbivore mammals	N/A	1346.38	498.16	
Small insectivore mammals	N/A	84.15	31.14	
Small terrestrial phase amphibian	N/A	1.61	1.28	

Chemical Name:	Bensulide
Use	Garlic
Formulation	Herbicide
Application Rate	6 lbs a.i./acre
Half-life	35 days
Application Interval	365 days
Maximum # Apps./Year	1
Length of Simulation	1 year

Acute and Chronic RQs are based on the Upper Bound Kenaga Residues.

The maximum single day residue estimation is used for both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables below should be noted ϵ <0.01 in your assessment. This is due to rounding and significa figure issues in Excel.

Endpoints			
Avian	Bobwhite quail	LD50 (mg/kg-bw)	1386.00
	Bobwhite quail	LC50 (mg/kg-diet)	5620.00
Aviali	Bobwhite quail	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	2.50

Dietary-based EECs (ppm)	Kenaga	
Dietal y-based EECs (ppm)	Values	
Short Grass	1440.00	
Tall Grass	660.00	
Broadleaf plants/sm Insects	810.00	
Fruits/pods/seeds/lg insects	90.00	
Small herbivore mammals	948.88	
Small insectivore mammals	59.30	
Small terrestrial phase amphibians	28.12	

ſ	Weight	Body	Ingestion (Fdry)	Ingestion (Fwet)	% body wgt	FI
ı	Class	Weight (g)	(g bw/day)	(g/day)	consumed	(kg-diet/day)
ı	Small	1.4	0.017	0.1	3.9	5.44E-05
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Body	Adjusted LD50	
Weight (g)	(mg/kg-bw)	
1.4	1386.00	
37	1386.00	
100	1386.00	

Dose-based EECs	Herpetofaunal Size Classes and Body Weights			
	small (g)	mid (g)	large (g)	
(mg/kg-bw)	1.4	37	100	
Short Grass	55.95	54.98	43.87	
Tall Grass	25.64	25.20	20.11	
Broadleaf plants/sm Insects	31.47	30.93	24.68	
Fruits/pods/seeds/lg insects	3.50	3.44	2.74	
Small herbivore mammals	N/A	897.59	332.11	
Small insectivore mammals	N/A	56.10	20.76	
Small terrestrial phase amphibian	N/A	1.07	0.86	

Chemical Name:	Bensulide
Use	onion
Formulation	Herbicide
Application Rate	6 lbs a.i./acre
Half-life	35 days
Application Interval	120 days
Maximum # Apps./Year	1
Length of Simulation	1 year

Acute and Chronic RQs are based on the Upper Bound Kenaga Residues.

The maximum single day residue estimation is used for both the acute and reproduction RQs.

RQs reported as "0.00" in the RQ tables below should be noted ϵ <0.01 in your assessment. This is due to rounding and significa figure issues in Excel.

Endpoints			
Avian	Bobwhite quail	LD50 (mg/kg-bw)	1386.00
	Bobwhite quail	LC50 (mg/kg-diet)	0.00
	Bobwhite quail	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	2.50

Dietary-based EECs (ppm)	Kenaga	
Dietary-based EECS (ppm)	Values	
Short Grass	1440.00	
Tall Grass	660.00	
Broadleaf plants/sm Insects	810.00	
Fruits/pods/seeds/lg insects	90.00	
Small herbivore mammals	948.88	
Small insectivore mammals	59.30	
Small terrestrial phase amphibians	28.12	

Weight	Body	Ingestion (Fdry)	Ingestion (Fwet)	% body wgt	FI
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Body	Adjusted LD50	
Weight (g)	(mg/kg-bw)	
1.4	1386.00	
37	1386.00	
100	1386.00	

Dose-based EECs	Herpetofaunal Size Classes and Body Weights			
Dose-based EECS	small (g)	mid (g)	large (g)	
(mg/kg-bw)	1.4	37	100	
Short Grass	55.95	54.98	43.87	
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Fruits/pods/seeds/lg insects	3.50	3.44	2.74	
Small herbivore mammals	N/A	897.59	332.11	
Small insectivore mammals	N/A	56.10	20.76	
Small terrestrial phase amphibian	N/A	1.07	0.86	